

## **ABSTRACT**

### **THE DEVELOPMENT OF LEARNING MEDIA MACROMEDIA FLASH BASIC METAL TREATMENT PROCESS INSTRUCTION AT BASIC KNOWLEDGE OF MECHANICAL ENGINEERING ON SMK N 2 PENGASIH KULON PROGO YOGYAKARTA**

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This research focused on media flash development. The purpose of this research are to know the procedure of the development of learning media with Macromedia Flash which is made to support Basic Knowledge of Machine Technical on SMK N 2 Pengasih Kulon Progo Yogyakarta and to define reliability of that media.

Method which is used in this research is R & D method. It took place on Machine Technical Departement of SMK Negeri 2 Pengasih Kulon Progo Yogyakarta. The data collecting technique was using questionnaire, that data is perform as quantitative data with 4 scales (range 1 to 4). Quantitative descriptive analysis technique was using analyzing data in this research. This technique was used to define reliability of the media.

The result of this research shows that the learning media that had been developed was appropriate to used as learning resource. Steps in designing this instructional media are: (1) preface study, includes process of divining manual study and observation; (2) composing product draft, includes learning development planning and media development proses; (3) product development, includes matter expert judgements, media expert judgements, limited usage judgements, product revision, wide usage judgements and media experiment. The result of instructional media reliability test are: (1) matter expert totality judgements shows persentage at level 80,00% with very proper criteria; (2) media expert totality judgements shows persentage at level 85,41% with very proper criteria; (3) limited usage totality judgements shows persentage at level 80,37% with very proper criteria; (4) wide usage totality judgements shows persentage at level 76,94% with very proper criteria; (5) media experiment totality judgements shows persentage at level 84,14% with very proper criteria.